

WHAT ON EARTH IS A  
MARS ROVER?

# Hmmm...



Mars Rovers  
Small motorized vehicle  
Propels itself across the  
planets surface searching  
for various points of  
interest.

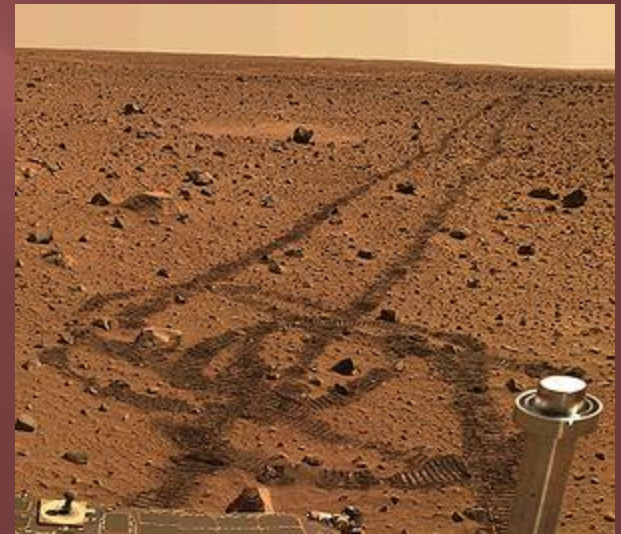
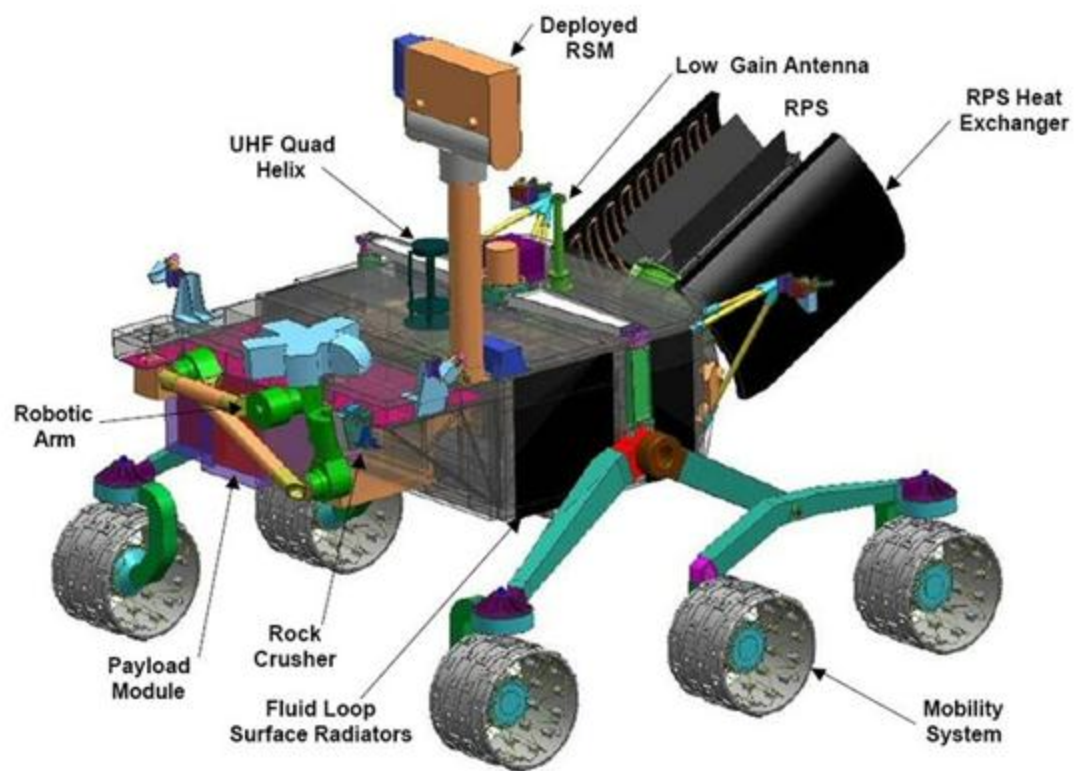


Photo taken by *Spirit* of Mars  
surface

# Key Parts

- ▣ Solar Panels – The rovers are powered by energy from the sun.
- ▣ Suspension – Rovers are durable and capable of overcoming many obstacles.
- ▣ Cameras – Spirit and Opportunity (most recent rovers launched) were equipped with nine camera for attaining different shots of Martian terrain.
- ▣ Antennas – For communication with Mars Odyssey or directly to earth.



# Specs.

- ▣ Six Wheels
- ▣ Low-Gain and High-Gain Antennas
- ▣ 1.5m X 2.3m X 1.6m
- ▣ High tech computer
- ▣ Microscope
- ▣ Rock abrasion tool
- ▣ Spectrometers
- ▣ Magnets

Artist's computer rendition of *Spirit*





# Curious Yet???

- ▣ *Curiosity* is the new and upcoming rover that is set to be launched in 2012.
- ▣ It will be comparable to the size of a mini cooper and weigh roughly 2 tons.
- ▣ Improvements include the ability to travel at 300 ft/sec (recent models could travel at a max speed of 10 ft/sec), powering by radioactive decay, and also has two computers on board in case of failure, the second computer will take over.

# Expectations

- ▣ NASA Researchers are hoping that *Curiosity* will be able to determine if Mars has in the past sustained life and if it will indeed in the future be able to sustain life.
- ▣ It is equipped an X-ray machine to delve beneath the surface to finds signs of water and/or past life.

*With the efforts of the NASA researchers and Mars Rover Teams, we will continue to garner information from Mars as to the planet itself and possibly continue learning more about our planet through discoveries on Martian terrain.*

